

WHAT IS CLAIMED IS:

1. An optical module comprising:

a body including an optical element;

an optical component including a nonmetallic ferrule.

5 and a metallic holder for securing a part of the ferrule;  
and

a sleeve positioned to the body, the sleeve securing  
a part of the holder to position the holder relative to the  
body.

10 2. The optical module according to claim 1, wherein  
the holder has a tubular shape.

3. The optical module according to claim 1, wherein  
the ferrule comprises a first portion having a first  
diameter and a second portion having a second diameter  
15 smaller than the first diameter, the holder securing the  
second portion of the ferrule.

4. The optical module according to claim 1, wherein  
the ferrule is made of zirconia.

20 5. The optical module according to claim 1, wherein  
the optical element includes a semiconductor  
light-emitting device.

25 6. The optical module according to claim 5, wherein  
the body includes a package having a first base made  
of metal and a second base made of ceramics, the  
semiconductor light-emitting device being installed on the

first base.

7. The optical module according to claim 5, further comprising an optical isolator provided between the ferrule and the semiconductor light-emitting device.

5 8. The optical module according to claim 5, wherein the package further includes a thermoelectric cooler, the semiconductor light-emitting device being provided on the thermoelectric cooler.

10 9. The optical module according to claim 5, wherein the package further includes a lens provided between the ferrule and the semiconductor light-emitting device.

10. The optical module according to claim 5, wherein the sleeve is welded to the body.

15 11. The optical module according to claim 1, further comprising a guide,

wherein the guide includes:

a first end having a face for abutting the holder,

a second end opposing to the first end, and

20 a hole extending from the first end to the second end for receiving the ferrule therein.

12. The optical module according to claim 11,

wherein the guide further includes a first portion having the first end and a second portion having the second end, the first portion receiving the ferrule from the first end and the second portion receiving a ferrule of an optical connector to be connected to the optical module from the

25

second end.

13. The optical module according to claim 12,  
wherein the guide further includes a third portion in  
conjunction with the first portion at a side opposite to  
5 the second portion and a step located between the first  
portion of the guide and the third portion of the guide,  
and

wherein the third portion secures the holder and the  
face for abutting the holder is provided at the step.

10 14. The optical module according to claim 11,  
wherein the sleeve includes a first portion having a  
first end for providing on the body of the optical module  
and a second portion, and  
the holder includes a first portion located in the second  
15 portion of the sleeve and a second portion having a second  
end for abutting the face of the guide.

15. The optical module according to claim 11, wherein  
the sleeve is welded to the body.

20 16. The optical module according to claim 1, further  
comprising a connector guide, the connector guide  
including:

a pair of side walls;

a projections provided on each side walls; and

25 a front wall having a hole for inserting the ferrule  
thereinto,

wherein the ferrule is inserted to the hole of the front

wall such that the holder abuts on an inner surface of the front wall.

17. The optical module according to claim 15, wherein the sleeve is welded to the body.